

Organization of Department of Commerce and Labor

CHAPTER IX

COAST AND GEODETIC SURVEY

A survey of the coast of the United States was authorized by act of Congress of February 10, 1807, and the plans formulated by F. R. Hassler, an eminent scientist of Swiss birth, were adopted. The necessity of securing instruments from abroad and the breaking out of hostilities with England delayed the organization of the Survey under the Treasury Department until 1816. The work had just begun when, by act of April 14, 1818, Congress repealed so much of the statute of 1807 as authorized the employment of other than army and navy officers in the Survey.

No surveys were made under the War Department, and after a full consideration of the unsatisfactory results obtained in the survey made under the Navy Department, as repeatedly suggested by the Secretary of the Navy and others, Congress revived the law of 1807, with somewhat extended scope, by the act of July 10, 1832, and the work was again placed under the Treasury Department. Operations had hardly been resumed before President Jackson on March 11, 1834, directed that the Survey be transferred to the Navy Department. Again the work proceeded so unsatisfactorily that in two years—March 26, 1836—it was retransferred by President Jackson to the Treasury Department, where it remained until July 1, 1903, when the Coast and Geodetic Survey was placed under the supervision of the Secretary of Commerce and Labor by act of Congress approved February 14, 1903.

By the act of March 3, 1843, prompted by suggestions of the expediency of a retransfer of the Survey to the Navy Department, Congress provided that the President should organize a board to make an intelligent and efficient inquiry for the development of a plan of permanent organization for the Survey. The report of this board, giving in detail its plan for reorganization, was approved by the President April 29, 1843, and the work of the Survey has been modeled for the past sixty years on the lines then laid down.

The name "Coast and Geodetic Survey" was authorized by its use in the sundry civil appropriation act approved June 20, 1878.

The authorization of the Coast Survey in 1807 established the first scientific bureau of the Government. As soon as the proper instruments and skilled workmen were provided and the survey was undertaken, the effect produced was a stimulus to all educational and scientific work. The methods used by the Survey have been the standard for similar undertakings in the United States, and many commendations of their excellence have been received from abroad. The influence of the Survey in the various operations resulting from the advancing scientific activity of the country can hardly be overestimated.

By joint resolution of February 5, 1889, the United States accepted the invitation of the Imperial German Government to become a party to the International Geodetic Association. The delegate is by law an officer of the Coast and Geodetic Survey, appointed by the President, and the annual subvention of \$1,500 is provided in the diplomatic appropriation bill.

For fifty years prior to 1898, nearly one-half of the vessels of the Survey were manned and officered by the Navy, but since the war with Spain these duties have devolved exclusively upon the civilians of the service.

The work of the Survey is under the immediate supervision of the Superintendent, and his representatives in the field are the assistants who have charge of the parties and command the vessels. The Office at Washington and the suboffices of the Survey at San Francisco and Manila are under assistants. The following quotation from the sundry civil appropriation act for the year 1904 indicates the field of operations of the Coast and Geodetic Survey:

For survey of the coasts of the United States and of coasts under the jurisdiction of the United States, including the survey of rivers to the head of tide water or ship navigation; deep-sea soundings, temperature and current observations along the coast and throughout the Gulf Stream and Japan Stream flowing off the said coasts; tidal observations; the necessary resurveys; the preparation of the Coast Pilot; continuing researches and other work relating to physical hydrography and terrestrial magnetism and the magnetic maps of the United States and adjacent waters, and the tables of magnetic declination, dip, and intensity usually accompanying them, astronomical and gravity observations; and including compensation, not otherwise appropriated for, of persons employed in the field work, in conformity with the regulations for the government of the Coast and Geodetic Survey adopted by the Secretary of Commerce and Labor; for special examinations that may be required by the Light-House Board or other proper authority; for commutation to officers of the field force while on field duty, at a rate to be fixed by the Secretary of Commerce and Labor equipment, and care of vessels used in the Survey, and also the repairs and maintenance of the complement of vessels; to be expended in accordance with the regulations relating to the Coast and Geodetic Survey from time to time prescribed by the Secretary of Commerce and Labor.

The scope of the survey has been extended from time to time to include Lake Champlain, the Pacific coast from San Diego to Panama, a transcontinental triangulation between the Atlantic and Pacific

coasts, surveys of the Hawaiian Islands, Alaska, and "other coasts under the jurisdiction of the United States."

The use of the facilities of the Coast and Geodetic Survey for research and study by scientific investigators and students of any institution of higher education is granted by law (31 Stat., 1039), and resolution of April 12, 1892. (See page 153).

Names and dates of service of chiefs of the Survey since it was established.

Names.	From—	To
F. R. Hassler. Do A. D. Bache. Benjamin Peirce. C. P. Patterson. J. E. Hilgard F. M. Thorn T. C. Mendenhall. W. W. Duffield H. S. Pritchett O. H. Tittmann	Dec. 12, 1846 Feb. 26, 1867 Feb. 18, 1874 Dec. 22, 1831 Sept. 1, 1886 July 9, 1886 Sept. 21, 1894 ' Dec. 11897	Feb. 17, 186 Feb. 17, 187 Aug. 15, 188 Aug. 7, 188 June 30, 189

LAW PERTAINING TO THE COAST AND GEODETIC SURVEY

[As modified by act of February 14, 1903.]

The President is authorized to cause a survey to be Surveys of Coastauthorized. taken of the coasts of the United States, in which shall R. S., Lossi. be designated the islands and shoals, with the roads or places of anchorage, within twenty leagues of any part of the shores of the United States; and also the respective courses and distances between the principal capes or headlands, together with such other matters as he may deem proper for completing an accurate chart of every part of

The President may also cause such examinations and Surveysbeyond 20 leagues from observations to be made with respect to Saint George's shore.

R. S., 4682. Bank, and to any other bank, or shoal, and the soundings and currents, although beyond the distance of twenty leagues from the shore to the Gulf Stream, as he may deem especially subservient to the commercial interests of the United States.

All appropriations made for the work of surveying the Methods emast of the United States shall be expended in accordance R. S., 4688. coast of the United States shall be expended in accordance with the plan of reorganizing the mode of executing the survey which has been submitted to the President by a board of officers organized under the act of March three, eighteen hundred and forty-three, chapter one hundred.

The President shall carry into effect the plan of the Employmentor board, as agreed upon by a majority of its members; officers. and shall cause to be employed as many officers of R. S., 4684. the Army and Navy of the United States as will be compatible with the successful prosecution of the work; the

officers of the Navy to be employed on the hydrographical parts, and the officers of the Army on the topographical parts of the work; and no officer of the Army or Navy shall receive any extra pay out of any appropriations for surveys.

Power to use sons. R. S., 4685.

The President is authorized, in executing the provisions books, etc., and to employ per of this Title, to use all maps, charts, books, instruments, and apparatus belonging to the United States, and to direct where the same shall be deposited, and to employ all persons in the land or naval service of the United States, and such astronomers and other persons, as he shall deem proper.

Power to employ vessels. R. S., 4686.

The President is authorized, for any of the purposes of surveying the coast of the United States, to cause to be employed such of the public vessels in actual service as he deems it expedient to employ, and to give such instructions for regulating their conduct as he deems proper, according to the tenor of this Title.

Employment of Army and Navy officers. R. S., 4687.

Officers of the Army and Navy shall, as far as practicable, be employed in the work of surveying the coast of the United States, whenever and in the manner required by the Department having charge thereof.

Allowance for subsistence. R. S., 4688.

The Secretary of Commerce and Labor may make such allowances to the officers and men of the Army and Navy, while employed on Coast and Geodetic Survey service, for subsistence, in addition to their compensation, as he may deem necessary, not exceeding the sum authorized by the Treasury regulation of the eleventh day of May, eighteen hundred and forty-four.

[Act of August 30, 1890 (26 Stat., 382), limits this section as to subsistence of officers of Navy.]

Small stores bought for and of Survey in remote localities.

Mar. 3, 1901.
(31 Stat., 1144.)

And hereafter the Secretary of Commerce and Labor sold to employees is authorized to purchase, from the appropriation for the Coast and Geodetic Survey, provisions, clothing, and small stores for enlisted men, and food supplies for field parties working in remote localities, such provisions, clothing, and small stores and food supplies to be sold to employees of said Survey, and the appropriation reimbursed.

Salary of Superintendent. R. S., 4689.

The salary of the Superintendent of the Coast Survey

shall be six thousand dollars a year.

Report. R. S., 4690.

The Coast and Geodetic Survey report shall be submitted to Congress during the month of December in each year, and shall be accompanied by a general chart of the whole coasts of the United States, on as large a scale as convenient and practicable, showing, as near as practicable, the configuration of the coasts, and showing, by lines, the probable limits of the Gulf Stream, and showing, by lines, the probable limits to which the soundings off the coast will extend, and showing, by the use of colors and expla-

a Five thousand dollars is appropriated.

nations, the exact portions of our coasts, of which complete charts have been published by the Coast and Geodetic Survey; also, showing such other parts of the coasts of which the triangulation, the topography, and the soundings have been completed, but not published, and, also, such parts of the coasts of which the triangulation and topography, or the triangulation only, have been completed.

The Secretary of Commerce and Labor is authorized Maps and to dispose of the maps and charts of the survey of the disposition coast of the United States at such prices and under R. S., 4691. such regulations as may from time to time be fixed by him; and a number of copies of each sheet, not to exceed three hundred, shall be distributed among foreign governments, and the departments of our own Government, and literary and scientific associations as may be designated by the Secretary of Commerce and Labor.

All printing and engraving for the Coast and Geodetic Survey shall hereafter be estimated for separately and in detail and appropriated for separately. (Applies to work done at Government Printing Office.)

Printing. Aug. 4, 1886. (24 Stat., 255.)

[There shall be printed] of the Report of the Superintendent of the Coast and Geodetic Survey, two thousand Sec. 78; amendeight hundred corpos in questo form, bound in one volume ed Apr. 20, 1896. eight hundred copies in quarto form, bound in one volume, (29 Stat., 171.) two hundred for the Senate, six hundred for the House, and two thousand for distribution of the Coast and Geo-

Jan. 12, 1895.

detic Survey.

The charts published by the Coast and Geodetic Sur- Jan. 12, 1895. vey shall be sold at cost of paper and printing as nearly is. as practicable; and there shall be no free distribution of such charts except to the Departments and officers of the United States requiring them for public use; and a number of copies of each sheet, not to exceed three hundred, to be presented to such foreign governments, libraries, and scientific associations and institutions of learning as the Secretary of Commerce and Labor may direct; but on the order of Senators, Representatives, and Delegates not to exceed ten copies to each may be distributed through the Superintendent of the Coast and Geodetic Survey.

The Secretary of Commerce and Labor may authorize Bulletins to the printing of the notices to mariners, tide tables, coast mariners, sec. 89. pilots, bulletins, and other special publications of the Coast and Geodetic Survey * * * in such editions as the interests of the Government and of the public may require.

The Secretary of Commerce and Labor shall report to Report of ex-Congress annually the number and names of the persons em-Pr. S., 261, 261. ployed during the last preceding fiscal year upon the Coast and Geodetic Survey and business connected therewith; the amount of compensation of every kind respectively paid them, for what purpose, and the length of time employed; and shall report a full statement of all other expenditures made under the direction of the Superintendent of the Coast and Geodetic Survey.

Preliminary surveys, R. S., 4662.

Whenever preliminary surveys are required to ascertain the necessity for any light-house, light-ship, beacon, or other warning to vessels, the erection of which is or may be authorized by law, or to determine the proper site for the same, or to ascertain more fully what the public exigency requires, the Secretary of Commerce and Labor may cause the necessary examinations and surveys on the seaboard to be made under the direction of the Superintendent of the Coast and Geodetic Survey, and those on the Northwestern lakes to be made under the direction of the Corps of Engineers. * * *

Mississippi River Commission. June 28, 1879. (21 Stat., 37.)

The President of the United States shall, by and with the advice and consent of the Senate, appoint seven commissioners, * * * one from the Coast and Geodetic * * The commissioners appointed from · Survey, the Coast and Geodetic Survey * shall receive no other pay or compensation than is now allowed them And the Secretary of Commerce and by law. Labor shall, when requested by said Commission, in like manner detail from the Coast and Geodetic Survey such officers and men as may be necessary, and shall place in the charge and for the use of said Commission such vessel or vessels and such machinery and instruments as may be under his control and may be deemed necessary * *

Hospital service. All necessary hospital and ambulance service * * * June 17, 1898. on vessels of the * * * Coast and Geodetic Survey (50 Stat., $^{175.}$) shall be performed by members of said corps [Navy].

Disbursements by field parties.

[The annual appropriation acts provide that, no advance of money to chiefs of field parties shall be made, unless to a commissioned officer, or to a civilian chief of party, who shall give bond in such sum as the Secretary of Commerce and Labor may direct; for furnishing points to State sur-

Special surveys; and also for making special surveys that may be required by the Light-House Board "or other proper authority."

Impairing public works. [Damaging or destroying surveying stations is made punishable by act of March 3, 1899, see page 76.]

Personnel.

[In addition to the Superintendent mentioned on page 100, Assistants, Aids, editors, scientists, electrotypers, etc., together with sufficient force to man the vessels of the Survey, are annually provided for in appropriation acts.]